MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2016/2017

TSE 2251 / TIS 2211 –SYSTEMS ANALYSIS AND DESIGN

(All sections / Groups)

08 OCTOBER 2016
09.00 a.m. – 11.00 a.m.
(2 HOURS)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of **10 pages (including this page).**
2. Answer ALL FIVE questions.
3. Please **WRITE ALL YOUR ANSWERS IN THE QUESTION PAPER ITSELF** in the space allocated.

Question 1

(a) Prototyping is one of the development techniques in designing and building scaled-down but functional version of a desired system. Give FOUR advantages of the prototyping technique. [4 marks]

(b) (i) Off-the-shelf software is one of the options in outsourcing software. What is *Outsourcing software*?

(ii) "Vendor viability is one of the factors to consider in choosing off-the-shelf software". Discuss the mentioned statement.

[2+2 marks]

Continued...

(c) Request for proposal (RFP) is a document provided to vendors to ask them to propose hardware and system software that will meet the requirements of a new system. Suggest TWO ways to gather better insightful of the requested hardware and system software. [2 marks]

Question 2

(a) Give FOUR possibilities that might cause a project delay. [2 marks]

Continued...

(b) Assume you have a project with SEVEN activities labelled A-G as shown in Table 1. Construct a network diagram based on the notation shown in Fig 1. For each activity, calculate its Early Finish (EF) and Late Finish (LF). Show/highlight the critical path on your network diagram. [8 marks]

Table 1

Activity	Estimated Time (days)	Preceding task
A	3	-
B	4	A
C	5	A
D	6	C
E	5	A, D
F	4	E
G	3	D,F

Activity	Estimated Time
Early Finish	Late Finish

Fig 1

Continued...

Question 3

(a) Draw a Decision Table based on the following scenario:

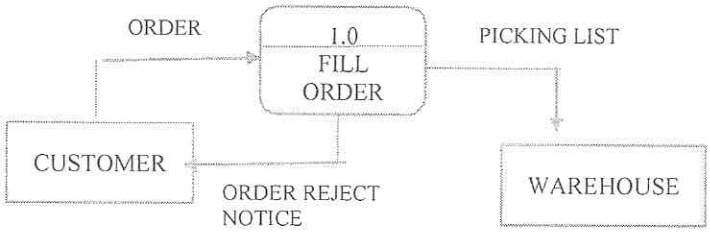
DeltaMedia College course catalog reads as follows: " To enroll in TIS3211, which is an advanced course, a student must complete two prerequisites – TIS3210 and TIS 2210. A student who completes either one of these prerequisites and obtains the dean's permission, will be allowed to take TIS3211."

i) Create a decision table that describes the DeltaMedia College course catalog regarding eligibility for TIS3211.
ii) Simplify the table you just created in 3a(i).

[4+1 marks]

Continued...

(b) Given the partial Level-1 DFD diagram for the order system as shown below. Draw a Level-2 DFD diagram for process 1.0 which consist of THREE sub-processes of VERIFY ORDER, PREPARE REJECT NOTICE, and ASSEMBLE ORDER. [5 marks]



Continued...

Question 4

(a) The term user-friendliness often used to describe system usability. However, it is too vague from a design standpoint to provide adequately information because it means different things to different people.

(i) *Time to learn* is one of the attributes used to measure user-friendliness. Explain the *Time to learn* term.

(ii) Suggest TWO ways on how to collect information in assessing user friendliness.

[2+1 Marks]

(b) Case study.

Zorro Sdn Bhd is a multinational event company specializing in organizing outdoor concert. The owner, Mr Zee is in the office today to chair a meeting to resolve dispute on new relational database. Someone mentioned to Mr Zee that the delay had something to do with achieving normalization.

(i) Briefly explain what normalization is. [1 mark]

(ii) Assume that Zorro main entities are its customers, employees, projects, and equipment. A customer can hire the company for more than one project, and employees sometimes work on more than one project at a time. Equipment, however, is assigned only to one project. Draw an ERD with corresponding cardinality showing those FOUR entities.

[4 marks]

Continued...

(iii) Create 3NF relations based on (ii) and its related attributes. [2 marks]

Continued...

Question 5

(a) "Open a new window whenever a user clicks on a hyperlink" should be avoided when designing the interface and dialogues of web sites. Give TWO justifications of the above statement. [3 marks]

(b) There are FOUR types of information system installation. Name the FOUR types of installation and briefly describe each type. [4 marks]

Continued...

(c) System maintenance is the last stage in System Development Life Cycle. Briefly differentiate between corrective maintenance and adaptive maintenance.
[3 marks]

End of Paper